DESIGN PANEL NO. 27 8-21-97

NEAR REAL-TIME ADVISORY THREAD ASSESSMENT - Tom Beever

OVERVIEW

The Data Analysis and Presentation (DAP) software consist of the following applications. The Near Real-Time Advisory Thread is a subset of DAP.

Near Real-time Advisory Thread

- Integrate Existing Advisory Systems into CLCS
  - Orbiter Power UP System (OPUS)
  - APU Neural Tool (ANNT)
    - G2 expert system shell running the ANNT knowledge base
    - Neur-On -Line Neural Net knowledge base
    - G2 Standard Interface ‘C’ code to tie G2 into real time data
  - APU, HPU, MPS High Speed Display
  - Propulsion Advisory Tool (PAT)
    - G2 expert system shell running the PAT knowledge base
    - G2 Standard Interface ‘C’ code to tie G2 into data services
    - Data services
    - Graphical User Interface
  - JGOAL
    - Java Based Client/Server replacement for PCGOAL
    - Initial release of limited functionality for 100 users for Thor
    - Additional functionality and support of more users for later CLCS
  - Others Under Consideration
    - Knowledge Based Autonomous Test Engineer (KATE)
    - Propulsion System Advisor (PSA)
    - DPS LCC Expert System (DLES)

- Interface with COTS Packages
  - SL-GMS

DESIGN PANEL NO. 27 8-21-97

Support Advisory Thread

- Robust Web Interface (RWI) to existing CAP Programs
  - Java Based
  - Begin with CAPs 104, 145, 134, 135, 142, 136 and 113 for Thor
  - Proceed with other CAPs for later CLCS releases

- Advanced Data Analysis Tool (ADAT)
  - Seamless Java based solution to user Data Analysis and Presentation needs in both the OCR and the office
  - Advanced features (i.e. zoom, FFT, linear regression, history vs real time, online stripchart, et al)

- Interfaces with COTS packages
  - MS Excel
  - SL-GMS
  - Lab View

ACTIONS	ACTIONEE	DUE DATE	STATUS
Establish policies regarding testing and deliverables for existing LPS products (PAT, JGOAL , etc).	Kirk Lougheed	DP2	Inwork

DESIGN PANEL NO. 27 8-21-97

MESSAGE CATALOG SERVICES DESIGN REVIEW - Jack Raucci

OVERVIEW

Message Catalog Services is responsible for providing an environment where users can define and manage messages that are eventually displayed in the RTPS environment.

Messages Catalog Services provides a GUI interface that allows users to create and/or modify system messages, application messages and user application messages that will be stored in a SDC message catalog.

Message Catalog Services also creates the SDC indexed message file from the SDC message catalog. As part of System Load, the indexed message file gets loaded on the HCI(s) that will allow for easy and improved access of the message in the real-time RTPS environment. This indexed file will contain both system and application messages.

Message Catalog Services also creates the TCID indexed message file from the SDC message catalog for user application messages. This indexed message file will become part of the TCID.

ACTIONS	ACTIONEE	DUE DATE	STATUS
No actions required.			

DESIGN PANEL NO. 27 8-21-97

SYSTEM MESSAGE SERVICES DESIGN REVIEW - Jack Raucci

OVERVIEW

System Message Services is an integrated support service which provides applications the ability to send and receive system and application message packets across the network. System Message Services executes on the CCP, DDP, and HCI platforms. System Message Services receives messaging information from the calling application and forwards this message packet information for creating the textual message for display on the workstations. The message packets are logged to the SDC Recording Facility. Message Services minimizes network traffic by using a central Message Catalog, which contains the entire CLCS Message Repository. The message body (i.e., actual text message) is not transmitted. The catalog is referenced to obtain information associated with each message at the destination.
To send messages, applications call the SMS **SMS_Send_Message API** and supply parameters to uniquely describe the message characteristics.
System Message Services also provides the capability to retrieve system and application messages from the SDC Recording Facility. System Message Services provides a programmatic interface applications can utilize for retrieving messages from the SDC Logging Facility.

ACTIONS	ACTIONEE	DUE DATE	STATUS

No actions required.

DESIGN PANEL NO. 27 8-21-97

SYSTEM MESSAGE OVERVIEW DESIGN REVIEW - Jack Raucci

OVERVIEW

System Messages consist of the following distinct CSCs:

- Message Catalog Services
  This CSC is primarily responsible for giving the user the ability to create messages to be stored in an SDC repository. In addition, this CSC creates the SDIC Indexed Message File that System Load is responsible for loading on the various HCI(s).
- System Message Services
  This CSC is primarily responsible for providing an API for application who wish to have a system message displayed on the HCI(s).
- System Message Viewer
  This CSC is primarily responsible for displaying the various system messages in the respective System Message Viewers.
- Applications issue the SMS_Send_Message API that contains the System Message Number and associated inserts for the requested message.
- SMS, when receiving the request in the HCI(s), format the text message by associating the Indexed Message File and associated inserts.
- SMS sends (i.e., writes) the formatted text message to a named pipe (1 pipe per SM Viewer).
- Each System Message Viewer reads its pipe to display the system message to the user.

ACTIONS	ACTIONEE	DUE DATE	STATUS

No actions required.